



Research Brief

Comparing Universal and Targeted Pre-Kindergarten Programs¹

Aryn M. Dotterer, Margaret Burchinal, Donna Bryant, Diane Early, and Robert C. Pianta

This study compared universal (available to all children) and targeted (offered only to children with specific risk factors) Pre-Kindergarten programs. Results showed that two aspects of structural quality (e.g., hours per day and teacher education) were higher in universal programs, but process quality (e.g., child interactions and feedback) was higher in targeted programs. Children's achievement was not different across programs.

It is generally believed that early childcare and education environments should enhance learning, especially for children from home environments that may not emphasize the development of the academic and social skills needed for school success. There is evidence suggesting that language and academic skills are higher when children attend higher quality child care programs.

Although the importance of early learning is widely agreed upon, much debate regarding who should be served exists. The decision about whether Pre-Kindergarten should be available to all children, regardless of background or whether it should be targeted to at-risk children, is one of the most pressing issues in early education that policymakers must decide when they decide to pass legislation to create or continue these early childhood programs.

Despite the debate about who is served, there is a lack of empirical evidence comparing the two types of programs in terms of quality and children's school readiness skills. This study compared the extent to which classroom characteristics differed by program type (universal or targeted) and whether program type was related to gains in low-income children's school readiness.

The Study

Researchers used data from two studies conducted by the National Center for Early Development and

Learning (NCEDL) entitled the Multi-State Study of Pre-Kindergarten (Multi-State) and the State-Wide Early Education Programs Study (SWEEP). The Multi-State Study involved 6 states of 40 Pre-Kindergarten sites in 2001-2002, and the SWEEP Study involved an additional 5 states with 100 sites in 2003-2004. In both studies, one classroom per site participated in the study for a total of 701 classrooms. Four children per classroom were randomly selected to participate.

Program type. All classrooms were classified based on type of Pre-Kindergarten program. There were 533 classes in the targeted group (76% of the sample) and 168 classes in the universal group (24%).

Types of Programs

Targeted Programs: Serve only children with particular characteristics or risk factors associated with school failure. States differ on what constitutes a 'risk factor.'

Universal Programs: Provide classroom experiences regardless of income or background.

¹This research brief is based on the following published study: Dotterer, A. M., Burchinal, M., Bryant, D., Early, D., & Pianta, R. (2013). Universal and targeted pre-kindergarten programmes: a comparison of classroom characteristics and child outcomes. *Early Child Development and Care*. Advanced online publication. <http://dx.doi.org/10.1080/03004430.2012.698388>
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Types of Quality

Structural Quality: Assessed by teachers years of education, length of the program in hours per day, and a teacher-child ratio.

Process Quality: Assessed with the Early Childhood Environment Rating Scale-Revised (ECERS-R) and the Classroom Assessment Scoring System (CLASS).

- **Interactions and Teaching** includes staff-child interactions, discipline, supervision, encouraging children to communicate, and using language to develop reasoning 360 skills.
- **Provisions for Learning** includes furnishings, room arrangement, gross motor equipment, art, blocks, dramatic play, and nature or science.
- **Emotional Climate** includes Positive Climate, Negative Climate (reversed), Teacher Sensitivity, Over-control (reversed), and Behavior Management.
- **Instructional Climate** includes Concept Development and Quality of Feedback.

Classroom characteristics and quality. Teachers reported on the proportion of non-white children and children from low-income families, defined as having incomes at or below 150% of the federal poverty level.

Child Outcomes. Child outcomes included measures of language/literacy skills and math skills.

Results

This study first examined the extent to which universal and targeted Pre-Kindergarten programs differed in terms of classroom characteristics, structural quality, and process quality. Results showed that universal classrooms had a significantly lower proportion of poor children in the class and a significantly higher proportion of White children per class compared to targeted classrooms.

Regarding structural features, targeted programs had shorter classes, teachers with fewer years of education, and better child-teacher ratios compared to universal programs.

In terms of process quality, targeted programs

had higher quality than universal programs on the ECERS-R Teaching/Interactions, ECERS-R Provisions for Learning, and CLASS Instructional Climate observed process quality dimensions.

Next researchers examined the extent to which gains in early learning skills among low-income children differed as a function of program type, while accounting for differences in children, classrooms, and programs.

Results indicated that children in universal classrooms had greater gains in expressive language compared to children in targeted classrooms. Program type was not related to gains in any of the other measures of early academic skills.

Regarding structural quality, results indicated that when teacher's education level was higher, children made greater gains in teacher's report of language and literacy skills and naming numbers. Children also made greater gains in naming letters when child-teacher ratio was lower and children had greater gains in receptive vocabulary, expressive language, and teacher's report of language and literacy skills, when instructional climate was higher.

Conclusion

This study did not find clear evidence that program type was reliably related to gains in children's early academic skills, however, findings do suggest that the two programs differed in classroom characteristics, structural quality, and process quality.

Consistent with previous research of process quality, this study also found that instructional climate was associated with gains in early academic skills. On average, process quality (language and interactions between children and teachers, learning materials, emotional climate, and instructional climate) was somewhat low in the present study. If more efforts were placed on increasing process quality, perhaps children's gains in early academic skills would be even greater.

For example, other research suggests that low-income children had larger gains in language and social skills when quality was in the good to high range. It is possible that efforts to improve quality can be achieved through professional development (either pre-service or in-service) for teachers and caregivers of young children. It appears as though all children could benefit from higher quality Pre-Kindergarten experiences.

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